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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,380	09/18/2003	Thomas Eggert	03191/000N075-US0	5025
7278	7590	10/12/2004	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			ESTREMSKY, SHERRY LYNN	
			ART UNIT	PAPER NUMBER

3681

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/665,380

Applicant(s)

EGGERT ET AL.

Examiner

Sherry L Estremsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 is/are allowed.
- 6) ☒ Claim(s) 1 and 5 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 6-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9-18-03 and 4-6-04</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Amisano et al., U. S. Patent 6,151,544.

Amisano et al. discloses a method of ascertaining and regulating shifts of reference position of an actuator-operated clutch (as represented in part by the flow chart of figure 2). The output  $X(x_i)$  of a sensor 11 which senses the position of the clutch actuator 2 (and therefore the position of clutch 5) is correlated to an estimated torque transmitted by the clutch  $C_{ST}$  ( $C_{FRIZ\_OLD}$ ) based on measured engine output torque, engine inertia, and engine acceleration. The correlated values define a transmissibility function  $F(X)$ . During actuation of the clutch 5, the clutch assumes a plurality of adjacent positions between completely open and completely closed. Each

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of these positions corresponds to a reference position of the clutch, since the transmissibility function  $F(X)$  is defined (and updated) for each of these positions (column 4, lines 15-25).

The reference position(s) of the clutch is routinely ascertained (column 6, lines 60-64).

Information pertaining to the ascertained reference position is routinely memorized and thus actualized (column 6, lines 1-13).

Operational parameters, excessive overheating or excessive cooling, which initiate shifts of reference position of the clutch are determined (column 2, lines 44-47; column 5, lines 35-50).

The steps of ascertaining the reference position and memorizing the information pertaining to the ascertained reference position are conformed to the shifted reference position when the determined operational parameter  $T_{FRIZ}$  exceeds a predetermined threshold value SOGLIA3. Instead of being a correlation between the current actuator/clutch position and current estimated torque, the reference position is a correlation between the current actuator/clutch position and the previously estimated torque corrected by a parameter K when the temperature exceeds a threshold value (column 7, lines 6-22).

(claim 1)

Presence of the solenoid valve 3 suggests a hydraulic force transmitting path between the actuator and the clutch.

(claim 5)

### *Allowable Subject Matter*

4. Claims 2-4 and 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 10-20 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

No reference nor combination of references was found which teaches an arrangement for regulating the shift of a reference position of an actuator-operated torque-transmitting clutch including a sensor arranged to transmit signals denoting the positions of a mobile multiple-position force-transmitting operating member, means for ascertaining the force transmitted by the operating member, means for monitoring torque being transmitted by the clutch, and a control unit arranged to conform a reference position and memorized information to a shifted reference position when an operational parameter that initiates shifts of reference position exceeds a predetermined threshold value, as required by claim 10.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent 6,309,325 (Baer et al.) October 2001 - discloses routinely ascertaining and memorizing a reference position of a clutch when the accelerator pedal is depressed more than a predetermined value, but the reference position is not determined if the accelerator pedal is not depressed more than the predetermined value.

U. S. Patent 6,711,486 (Karlsson et al.) March 2004 - discloses a control computer which receives information from various sensors to identify a reference position of a clutch.


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherry L Estremsky whose telephone number is (703) 308-2164. The examiner can normally be reached on Tuesday and Friday from 7:30 a.m. to 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLE

  
SHERRY ESTREMSKY  
PRIMARY EXAMINER  
AU3681 10-1-04